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FLETCHER, MARLON T	
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BEFORE THE BOARD OF PATENT APPEALS AND INTERFEROENCES

Application Number: 10/680,591
Filing Date: October 06, 2003
Appellant(s): LUDWIG, LESTER F.

Jeffrey Lottspeich
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed March 31, 2008 appealing from the Office action mailed 11/01/2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

09/812,400

10/676,926

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct. The changes are as follows: Claims 27-52, 70-86, 96-104, 110-114, and 116 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ishigaki et al. (U.S. 6,271,455).

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,271,455	Ishigaki et al.	8-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 27-52, 70-86, 96-104, 110-114, and 116, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishigaki et al. (6,271,455).

Ishigaki et al. (6,271,455) disclose a method for interconnecting electronic musical instruments and signal processing systems, said method comprising: receiving instrument audio signals (48, 51) and (52 - audio information) at an outgoing multi-channel audio interface (44), wherein said instrument audio signals (48, 51) generated signals comprise at least two independent audio by an external musical instrument (figure 2). It is obvious to add a mere duplication of components such as additional audio sources, wherein mere duplication of parts involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 193 USPQ 8.

Ishigaki et al. (6,271,455) disclose providing said instrument audio signals to an external signal processing system (figure 3); receiving MIDI control signals (43) at an outgoing control interface, wherein said MIDI control signals are generated by said external musical instrument (figure 2); and providing said MIDI control signals to said external signal processing system (column 5, line 51 - column 6, line 8).

Ishigaki et al. (6,271,455) disclose the method, wherein said outgoing multi-channel audio interface and said outgoing control interface are integrated to utilize a common physical interface connector (multiplexer - figure 2).

Ishigaki et al. (6,271,455) disclose the method, wherein said outgoing multi-channel audio interface and said outgoing control interface utilize a plurality of physical interface connectors (44, 59).

Ishigaki et al. (6,271,455) disclose the method, wherein said instrument audio signals and said MIDI control signals are multiplexed to form a common multiplexed signal that is provided to said external signal processing system (figure 2).

Ishigaki et al. (6,271,455) disclose the method, wherein said common multiplexed signal is provided to said external signal processing system using a wireless communication link (59, (satellite 4)).

Ishigaki et al. (6,271,455) disclose the method, wherein said outgoing multi-channel audio interface and said outgoing control interface are integrated to utilize a common physical interface connector, and wherein said common multiplexed signal is provided to said external signal processing system using said common physical interface connector (column 5, lines 41-57).

Ishigaki et al. (6,271,455) disclose the method, said method further comprising: receiving incoming control signals at an incoming control interface, wherein said incoming control signals are generated by said external signal processing system, said incoming control interface providing said incoming control signals to said external musical instrument (column 4, line 43 - column 5, line 4; figure 1 - Bi-directional transmission).

Ishigaki et al. (6,271,455) disclose the method, wherein said incoming control signals comprise signals of MIDI format (inherent- Bi-directional transmission).

Ishigaki et al. (6,271,455) disclose the method, said method further comprising: receiving a plurality of incoming audio signals at an incoming multi-channel audio interface, wherein said plurality of incoming audio signals are generated by said external signal processing system, said incoming multi-channel audio interface providing said plurality of incoming audio signals to said external musical instrument (figure 1).

Ishigaki et al. (6,271,455) disclose the method, said method further comprising: receiving non-MIDI control signals at an outgoing control interface, wherein said non-MIDI control signals are generated by said external musical instrument, said outgoing control interface providing said non-MIDI control signals to said external signal processing system (figure 2).

Ishigaki et al. (6,271,455) disclose the method, said method further comprising: receiving electrical power at a low-power interface (multiplexers are low power interface), wherein said electrical power is provided by said external signal processing system, said low-power interface providing said electrical power to said external musical instrument, and wherein said electrical power is adapted to provide power to an audio subsystem (60A) integrated with said external musical instrument.

Ishigaki et al. (6,271,455) disclose the method, said method further comprising: receiving electrical power at a low-power interface, wherein said electrical power is provided by said external signal processing system, said low-power interface providing said electrical power to said external musical instrument, and wherein said electrical power is adapted to provide power to a control subsystem (60A) integrated with said external musical instrument.

Ishigaki et al. (6,271,455) disclose the method, said method further comprising: receiving electrical power at a low-power interface, wherein said electrical power is provided by said external signal processing system, said low-power interface providing said electrical power to said external musical instrument, and wherein said electrical power is adapted to provide power to an audio subsystem and a control subsystem (60A) integrated with said external musical instrument.

Ishigaki et al. (6,271,455) disclose the method, said method further comprising: receiving moderate-load electrical power at a moderate-power interface, wherein said moderate-load electrical power is provided by said external signal processing system, said moderate-power interface providing said moderate-load electrical power to said external musical instrument, and wherein said moderate-load electrical power is adapted to provide power to auxiliary systems associated with said external musical instrument (Bi-directional - figure 1).

Ishigaki et al. (6,271,455) disclose the method, wherein said moderate-load electrical power provided by said moderate-power interface is adapted to provide power to controllable lighting devices (display includes lighting via element 58) associated with said external musical instrument.

Ishigaki et al. (6,271,455) disclose the method, wherein said moderate-load electrical power provided by said moderate-power interface is adapted to provide power to a video device (via element 58) associated with said external musical instrument.

Ishigaki et al. (6,271,455) disclose the method, said method further comprising: receiving outgoing video signals at an outgoing video interface, wherein said outgoing video signals are generated by said external musical instrument, said outgoing video interface providing said outgoing video signals to said external signal processing system (figure 2).

Ishigaki et al. (6,271,455) disclose the method, said method further comprising: receiving incoming video signals at an incoming video interface, wherein said incoming video signals are generated by said external signal processing system, said incoming video interface providing said incoming video signals to said external musical instrument (figure 3).

Ishigaki et al. (6,271,455) disclose the method, wherein said common physical connector is attached to one end of a cable for connecting said outgoing multi-channel audio interface and said outgoing control interface to said external signal processing system (figure 1 - public line connection).

Ishigaki et al. (6,271,455) disclose the method, wherein said common physical connector is attached to one end of a cable for connecting said outgoing multi-channel audio interface and said outgoing control interface to said external musical instrument (figure1).

Ishigaki et al. (6,271,455) disclose the method, wherein said common physical connector for mating with a connector integrated with the external musical instrument (inherent in figure 1)

Ishigaki et al. do not disclose an optical

However, Official Notice is taken with respect to it being well known in the art to provide optical communication link with multiplexed signal transmission.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the well known teachings in the art with Ishigaki et al., because teachings merely provide an optional transmission type.

Inherently the MIDI data forming apparatus (41) is a musical instrument. MIDI stands for Musical Instrument Digital Interface. We know that many musical instruments are capable of producing MIDI data. The reference is in a musical environment.

Inherently a musical instrument can be used as element (45) for producing audio signals. A musical instrument in its broadest terms can be defined as any device for providing musical tones.

(10) Response to Argument

A1. Applicant argues that Ishigaki et al. disclose different elements representing audio and MIDI. Applicant argues that elements (41) and (45) are two different entities.

However, the examiner disagrees with applicant's view. Elements (41) and (45) are part of the musical device or instrument (2) which generates music (see figure 2). A musical instrument in its broadest term can be any instrument or device that generates music. Clearly element (2) generates music.

A2. Applicant argues that Ishigaki et al. do not teach audio signals. Applicant states that elements (48) and (51) don't provide audio signals and that the D/A converter converts audio signals.

However, the examiner disagrees. Elements (48) and (51) clearly provide audio signals. The audio data is provided as a signal which is transmitted or sent to multiplexer (44). A signal carrying audio data is an audio signal. The D/A converter is exactly what it is called: a converter. It converts the signal into an analog signal which is provided to a transducer for audible audio. This audible audio is based on the audio data of the audio signal.

A3. Applicant argues that Ishigaki et al. do not disclose an output interface. Applicant states that the multiplexer provides only an internal interface.

However, the disagrees. Figure 2 clearly shows an input and output to multiplexer (44), wherein there is an interface (connection) on both sides (input/output) of the multiplexer (44).

B. Applicant argues that Ishigaki et al. are silent to:

MIDI being generated by a first instrument

or

MIDI being provided to a second instrument.

However, the examiner again disagrees with the applicant. MIDI is generated by a first musical instrument or device (2) via element (41). Further, MIDI is provided through transmission device (1) to karaoke instrument device (7).

D. Applicant argues allowability of claims.

No claims are allowed.

Ishigaki et al. provide all the teachings of the claim elements, except those obvious variations discussed above. The claims are written in a broad manner and do not define over the prior art. The claims simply recite a musical interface or connector that receives audio and MIDI and outputs MIDI. There is nothing new and improved about these features.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Marlon T Fletcher/

Primary Examiner, Art Unit 2837

Conferees:

Lincoln Donovan /LD/

Darren Schuberg /DS/